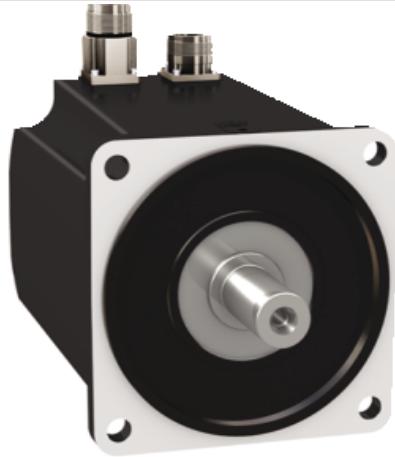


# Product datasheet

## Characteristics

# BMH1402P22F1A

## servo motor BMH - 18.5 Nm - 4000 rpm - untapped shaft - with brake - IP65/IP67



### Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	4000 rpm
Continuous stall torque	18.5 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 18.5 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Peak stall torque	50.3 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 50.3 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal output power	3500 W for LXM32.D72N4 at 24 A, 400 V, three phase 3500 W for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal torque	12.2 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 12.2 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal speed	3000 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 3000 rpm for LXM32.D72N4 at 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Smooth shaft
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

### Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	16.83 A
Continuous power	4.44 W
Maximum current Irms	57.4 A for LXM32.D72N4

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Maximum permanent current	57.4 A
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	18 N.m holding brake
Motor flange size	140 mm
Number of motor stacks	2
Torque constant	1.1 N.m/A at 120 °C
Back emf constant	70.7 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	33.5 kg.cm <sup>2</sup>
Stator resistance	0.23 Ohm at 20 °C
Stator inductance	3 mH at 20 °C
Stator electrical time constant	13 ms at 20 °C
Maximum radial force Fr	2240 N at 1000 rpm 1780 N at 2000 rpm 1550 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	227 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Product weight	14.3 kg

### Offer Sustainability

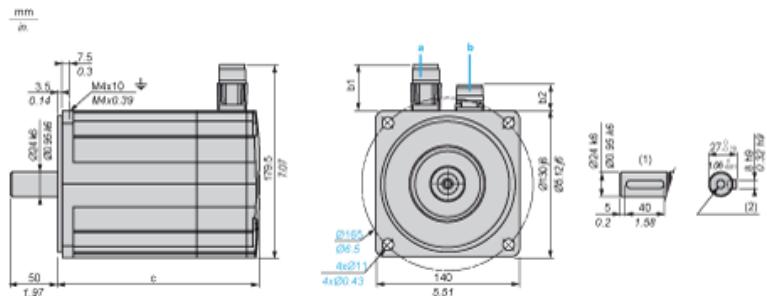
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

### Contractual warranty

Warranty	18 months
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Servo Motors Dimensions

Example with Straight Connectors



a: Power supply for servo motor brake  
 b: Power supply for servo motor encoder  
 (1) Shaft end, keyed slot (optional)  
 (2) For screw M8 x 25 mm/M8 x 0.98 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
39.5	25.5	39.5	39.5	192	227

Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
1.55	1.00	1.55	1.55	7.55	8.93

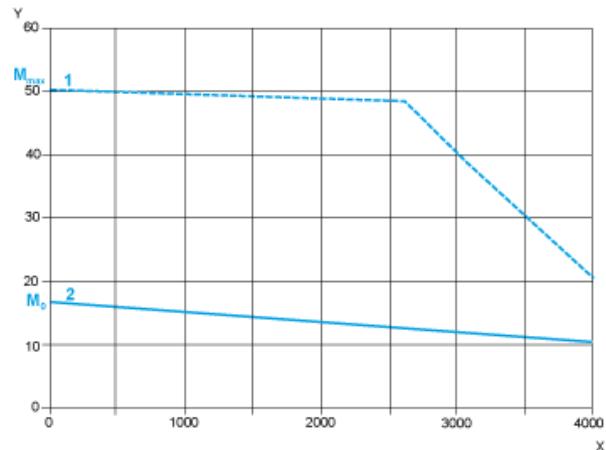
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400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D72N4 servo drive



X Speed in rpm  
Y Torque in Nm  
1 Peak torque  
2 Continuous torque

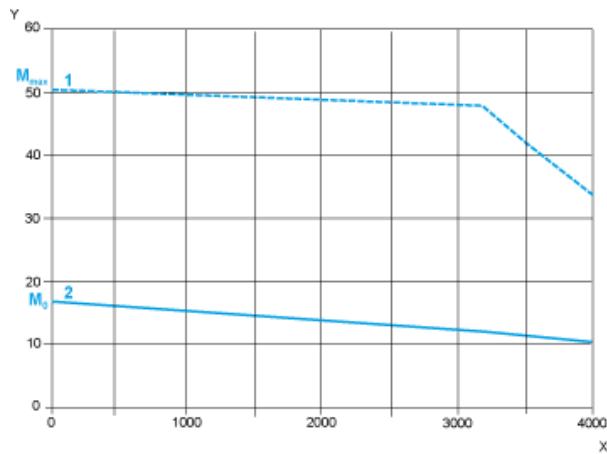
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480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



X      Speed in rpm  
Y      Torque in Nm  
1      Peak torque  
2      Continuous torque